Fuel Oils Category - Comments of Environmental Defense

(Submitted via Internet 7/2/02)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for the Fuel Oils Category.

The test plan prepared by the Olefins Panel of the American Chemistry Council (ACC) is extraordinarily complex. It proposes that 8 ethylene oxide streams be considered a category. However, the streams are highly complex mixtures, which differ substantially in their content. There really is little justification to support this category. For example, Quench Oil contains 65% C7-18 cyclic olefins and at least 15 other agents. On the other hand, pyrolysis fuel oil contains 20% cyclopentadiene and at least 10 other agents. Quench oil does not contain cyclopentadiene and pyrolysis fuel oil does not contain cyclic olefins. A quick review of table 3 reveals that each of the eight test streams is clearly distinct from each other. Lumping them together as a category is convenient but certainly not scientifically justified.

Another major problem with this test plan is that the robust summaries include data from only four streams: light pyrolysis fuel oil, biphenyl feedstock, aromatic pyrolysis oil and coal-derived fuel oils, of which only a couple are HPV streams. The composition of those streams was not presented so it is impossible to tell whether or not they are representative of the streams considered under the HPV program. Moreover, the test streams contain many chemicals for which there is little or no toxicological data.

The test plan did present available data on some of the chemical constituents contained in the fuel oils (i.e. naphthalene, biphenyl and dicyclopentadiene). These data are helpful but not adequate to fulfill the requirement for screening level information on HPV chemicals.

Based on the above considerations, we make the following recommendations for each of the test streams.

Heavy pyrolysis oil -The composition of this stream was not presented in table 3 although the narrative says that it contains C10+ and polycyclic aromatic hydrocarbons. The test plan states that the American Petroleum Institute (API) intends to submit a test plan on heavy pyrolysis oil in 2003. If this is the case, then it would be less confusing to indicate that heavy pyrolysis oil is not part of this category but rather will be addressed separately. If this is NOT the case and heavy pyrolysis oil is instead to be evaluated as part of this category, the lack of information on its composition (and resulting lack of indication as to whether the robust summaries contain any relevant information) would require that the full battery of HPV tests be conducted. (Obviously, if additional composition information is provided showing that this stream is similar to other streams within this category and/or has adequate information, this conclusion would change.)

Quench oil -This stream contains 65% C7-18 cyclic olefins and numerous other agents. It does not appear that the data in the robust summaries address this stream; as a result, the full battery of HPV tests is needed here as well.

Pyrolysis fuel oil from pyrolysis gasoline distillation û This stream contains dicyclopentadiene as a major ingredient. This stream appears similar to the mixtures covered by the olefins panel in their test plans for cyclodiene dimer concentrates and resin oils. If this is the case and these streams have adequate toxicology data, then additional studies covered under the fuel oils test plan may not be needed.

Combined fuel oil streams 5 and 6 -Data do not appear to be available for these mixtures so we recommend the full battery of HPV screening level tests.

Hydrotreated flux oil -This stream appears to be covered by studies presented and/or planned under the auspice of other test plans submitted by the ACC and API so no additional studies appear to be needed.

Biphenyl concentrate -Existing data for this stream which is 65-95% biphenyl and data for biphenyl alone appear adequate to fulfill HPV requirements, so no additional studies are needed on this stream.

Thank you for this opportunity to comment.

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